UC San Diego Health
CENTER FOR PAIN MEDICINE

# Silencing the Cycle - Targeted NaV1.8 Inhibition for Severe Refractory Dysmenorrhea: Three Patient Cases

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## INTRODUCTION

Dysmenorrhea affects 50-90% of reproductive-aged women and is characterized by severe, recurrent acute pain crises with significant occupational, social, and physical implications. For many patients, symptoms can substantially impair daily functioning, work/school attendance, physical activity, and quality of life. Because standard therapies often fail to provide adequate relief, pain specialists play a critical role in implementing targeted, individualized, opioid-sparing analgesic regimens. Suzetrigine, a novel non-opioid analgesic, selectively inhibits peripheral NaV1.8 voltage-gated sodium channels expressed on nociceptive neurons and therefore may suppress nociceptive firing in uterine visceral afferents. This mechanism represents a novel therapeutic approach for menstrual pain while avoiding the risks of opioids. We present three cases of refractory dysmenorrhea successfully improved with suzetrigine, highlighting a potential treatment option for severe menstrual pain in those who have not responded to conventional therapies.

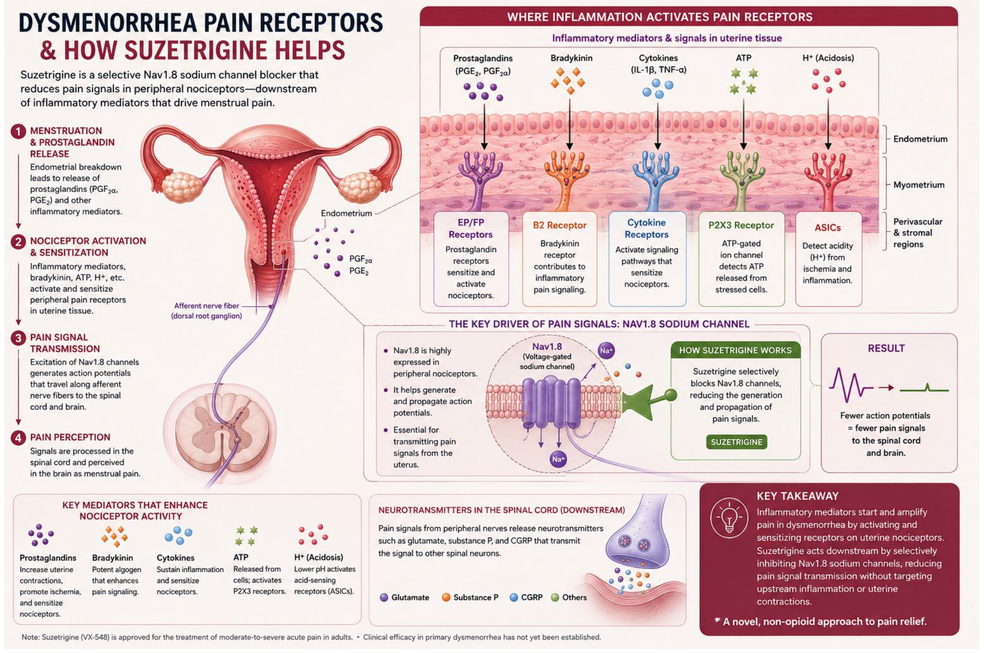



**Figure 1.** Schematic depiction of the transmission of pain in dysmenorrhea and the mechanism by which suzetrigine could act to alleviate symptoms

### Case 1

**Patient A**, a 29-year-old female, presented with debilitating dysmenorrhea and pelvic pain that worsened following endometriosis excision. Her cyclical pain left her bedbound and was refractory to standard analgesics. After being prescribed a perimenstrual suzetrigine regimen (7-10 days duration per cycle), she reported a peak pain reduction from 9/10 to 6/10 on the Numeric Rating Scale (NRS) at the three month mark. She experienced no “cognitive clouding” which allowed her to continue PhD studies through menses.

### Case 2

**Patient B,** a 20-year-old female with suspected endometriosis, presented with escalating dysmenorrhea (10/10 on NRS), depressed mood, and suicidal thoughts after failing hormonal therapies, NSAIDs, and opioids. While awaiting surgical evaluation, she was prescribed a perimenstrual course of suzetrigine. At close two-week follow-up, she endorsed significant menstrual pain reduction to a 5/10 on NRS and resolution of psychiatric symptoms.

### Case 3

**Patient C**, a 32-year-old female with recurrent endometriosis, Bipolar II, and a high opioid risk score, presented with very severe vomiting-associated dysmenorrhea. Hormonal suppression and neuropathic agents were either contraindicated or not tolerated, leaving her reliant on opioids. She was started on perimenstrual suzetrigine, which provided profound analgesic relief during menses (approximately 50% pain reduction) and helped her to decrease opioid consumption by nearly half.

## DISCUSSION

While suzetrigine is currently only approved for the treatment of moderate to severe acute pain in adults, its therapeutic horizon is rapidly expanding, with growing interest in its potential applications across a broader range of pain conditions. To our knowledge, there are not yet any documented cases describing the use of suzetrigine for refractory dysmenorrhea or other cyclical gynecologic pain conditions. This case report describes a novel, safe and opioid-sparing treatment option for patients with severe menstrual pain who have limited response to conventional therapies. These findings may help bridge a critical therapeutic gap while setting the stage for future investigation of NaV1.8 inhibition in pelvic pain - a historically understudied and underserved area within the field of pain medicine.

## METHODS & MATERIALS

As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements as per the University of California, San Diego policy. Patient informed consent was obtained for submission of this case report.

This case report includes an off-label indication/use of the medication, suzetrigine (Journavx), being discussed. The authors declare no financial ties, affiliations, or conflicts of interest with Vertex Pharmaceuticals or any of its subsidiaries.

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